Remarks

I. Introduction

This is in response to the Office Action dated November 17, 2004. The Office Action rejected claims 1-24 under 35 U.S.C. §102(a) as being anticipated over U.S. Patent No. 6,154,775 to Coss et al. (Coss). Claims 11 and 23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Coss in view of U.S. Patent No. 6,498,782 to Branstad et al. (Branstad).

The Abstract has been amended in response to the objection to the Specification.

In response to the §102 and §103 rejections, Applicants have amended claims 1-24. Claims 1-24 remain for consideration.

II. Rejections under 35 U.S.C. §102

Claims 1-24 were rejected under 35 U.S.C. §102(a) as being anticipated over Coss. In order for a claim to be anticipated under 35 U.S.C. §102, **each and every** limitation of the claim must be found either expressly or inherently in a single prior art reference. PIN/NIP, Inc. v. Platte Chem. Co., 304 F.3d 1235, 1243 (Fed. Cir. 2002). In the present case, Coss does not show each and every limitation of claims 1-4, 6-9, and 14-29. Therefore, Applicants request the withdrawal of the rejection under 35 U.S.C. §102(b).

The present invention is generally directed to a method and system for monitoring traffic in a data communication network. Coss is directed to a firewall that can support multiple security policies, multiple users, or multiple security policies as well as multiple users, by applying any one of several distinct sets of access rules for a given packet. For the reasons discussed below, Coss does not anticipate the presently claimed invention under the strict §102 standard as set forth above.

Independent claim 1 is directed to a method for monitoring traffic in a network. Claim 1, as amended, contains the steps of:

Amendments to the Drawings

Replacement drawing sheets are being submitted herewith.

receiving at least one data packet at a network interface, said network interface comprising:

a) a first module handling communications between the network and a host, and

b) at least one programmable processing module in communication with said first module; and

processing information in the at least one data packet using the at least one programmable processing module to generate network information.

Thus, the claim requires a first module handling communications between the network and a host and one or more programmable processing modules generating network information from the processing of one or more data packets.

Coss does not disclose each and every element of claim 1 and therefore claim 1 is not anticipated under 35 U.S.C. §102(a). Coss discloses, in the Summary, techniques for implementing computer network firewalls so as to improve processing efficiency, improve security, increase access rule flexibility, and enhance the ability of a firewall to deal with complex protocols. In the Background, Coss discloses that "techniques known as packet filtering, effected at a network processor component known as a firewall, have been developed and commercialized." Coss further discloses, in col. 6, lines 21-25, that the firewall examines the applicable rules to ascertain whether the packet may pass. Coss also discloses, in col. 2, lines 33-36, that a "computer network firewall may make use of dynamic rules ... for processing packets." Coss also discloses, in col. 5, lines 42-59, stateful packet filtering – caching rule processing results for received packets and then utilizing the cached results to bypass rule processing for subsequent similar packets. The cache can include a session key, the number of the applicable rule, and statistical information.

Thus, Coss determines whether to transmit a packet through the filter based on one or more rules. Coss discloses a firewall that determines whether a packet may pass and, when the determination is positive, the output of the firewall is the packet itself. Coss does not, however, disclose a programmable

processing module in communication with a first module for generating network information. As shown in Coss's Fig. 4, the "statistics" generated by the stateful packet filtering relates to the number of packets passed or dropped according to a particular rule. Coss does not, however, disclose a programmable processing module generating network information.

Further, Coss discloses one module (i.e., the firewall) performing the filtering. As a result, Coss does not disclose a first module handling communications between the network and a host and a programmable processing module in communication with the first module to generate network information. These distinctions render Coss unable to anticipate claim 1 under §102.

Independent claim 13 is allowable for reasons similar to those described above in connection with claim 1. In particular, claim 13 is an apparatus for monitoring traffic in a network. Claim 13, as amended, contains the limitations of:

> a network interface receiving at least one data packet, said network interface comprising:
> (a) a first module handling communications between the network and a host, and
> (b) at least one programmable processing block in communication with the first module and processing information in the at least one data packet to generate network information.

Thus, the claim requires a network interface receiving one or more data packets and having a first module handling communications between the network and a host and at least one programmable processing module generating network information from the processing of one or more data packets. For the reasons described above, Coss does not disclose a programmable processing module for generating network information. Moreover, Coss does not disclose a first module handling communications between the network and a host and communicating with the programmable processing module. Thus, Coss does not anticipate each and every limitation of claim 13.

For the reasons discussed above, independent claims 1 and 13 are allowable over Coss. Dependent claims 2-12 and 14-24 depend upon an allowable independent claim and are therefore also allowable. In addition, these dependent claims add additional patentable subject matter and are also allowable for the reasons discussed below.

Dependent claims 3 and 15 contain the limitation that the at least one programmable processing module is generated from a processing query expressed in a high-level language. Coss discloses, in col. 4, lines 20-26, using an asterisk (*) for wild card entries in a table corresponding to the access rules of the firewall. As described above, Coss does not disclose a programmable processing module for generating network information. Therefore, Coss does not disclose generating one or more programmable processing modules from a processing query expressed in a high level language. Therefore, dependent claims 3 and 15 are allowable for the reasons discussed above in connection with claims 1 and 13, respectively.

Dependent claims 4 and 16 contain the limitation that the processing query accesses functions defined in the first module. Coss discloses, in col. 8, lines 35-40, that dynamic rules can be loaded at any time and are included in the access rules. Coss does not, however, disclose having a processing query accessing functions defined in the first module. Therefore, dependent claims 4 and 16 are allowable for the reasons discussed above in connection with claims 1 and 13, respectively.

Dependent claims 9 and 21 contain the limitation that the first module can pass parameters to the at least one processing module, thereby changing the processing performed by the at least one processing module. Coss discloses, in col. 8, lines 28-40, that dynamic rules allow a given rule set to be modified based on events happening in the network without requiring that the entire rule set be reloaded. Thus, Coss discloses changing a rule without an entire rule set having to be reloaded. Coss does not, however, disclose parameters being passed to a

processing module to change the processing performed by the processing module. Therefore, dependent claims 9 and 21 are allowable for the reasons discussed above in connection with claims 1 and 13, respectively.

Dependent claims 10 and 22 contain the limitation that the first module can instantiate new processing modules dynamically. Coss does not disclose any instantiation and therefore does not disclose instantiating new processing modules dynamically. Therefore, dependent claims 10 and 22 are allowable for the reasons discussed above in connection with claims 1 and 13, respectively.

Dependent claims 2, 5-8, 12-14, 17-20, and 24 are allowable for the reasons stated above and because they depend from an independent claim.

III. Rejections under 35 U.S.C. §103

Claims 11 and 23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Coss in view of U.S. Patent No. 6,498,782 to Branstad et al. (Branstad). None of the cited references, either alone or in combination, disclose Applicants' invention.

As described above, Coss requires a network interface receiving one or more data packets and having a first module handling communications between the network and a host and at least one programmable processing module generating network information from the processing of one or more data packets. For the reasons described above, Coss does not disclose a programmable processing module for generating network information. Moreover, Coss does not disclose a first module handling communications between the network and a host and communicating with the programmable processing module. Thus, Coss does not disclose the limitations of independent claims 1 and 13, respectively.

Dependent claims 11 and 23 contain the limitation that the network is a Gigabit Ethernet network. As the Office Action admits, Coss does not disclose the limitations of claims 11 and 23.

Branstad fails to cure the deficiencies of Coss. Branstad is directed to a Gigabit Ethernet communications adapter for implementing communications in a

communications network. Branstad discloses, at col. 2, lines 42 – 47, a transmission queue that can be subdivided into multiple priority queues and a transmission rate being set for each transmission queue. Branstad does not, however, disclose a programmable processing module for generating network information. In particular, Branstad does not disclose generation of any type of network information. Moreover, Branstad does not disclose a first module handling communications between the network and a host and communicating with the programmable processing module.

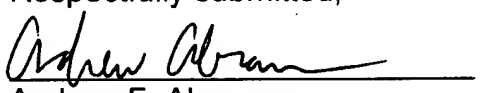
Further, Branstad is focused on communications methods and Gigabit Ethernet communications adapter providing quality of service and receiver connection speed differentiation. Branstad does not disclose a firewall. Further, Coss does not disclose a communications adapter. Therefore, there is no motivation to combine Branstad with Coss.

Dependent claims 11 and 23 are allowable for the reasons stated above and because they depend from an independent claim. As such, Applicants request withdrawal of the §103 rejection with respect to these claims.

IV. Conclusion

For the reasons discussed above, all pending claims are allowable over the cited art. Reconsideration and allowance of all claims is respectfully requested.

Respectfully submitted,



Andrew F. Abramson
Reg. No. 52,538
Attorney for Applicants
Tel.: 973-533-1616

Date: March 15, 2005
AT&T Corp
Room 2A-207
One AT&T Way
Bedminster, NJ 07921